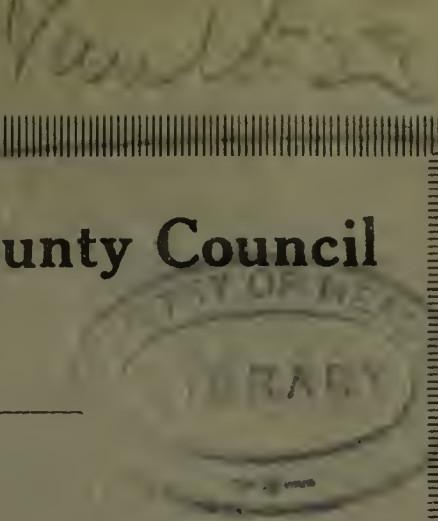


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# Cambridgeshire County Council

## ANNUAL REPORT

OF THE

### Medical Officer of Health

FOR THE

Administrative County of Cambridge,

*For the Year 1925.*

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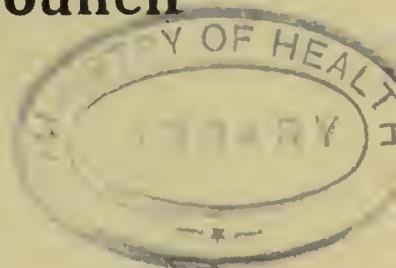
CAMBRIDGE :

"Cambridge Chronicle," Ltd.,  
9, Market Hill.



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## GENERAL STATISTICS.

Area (acres) ... ... ... ... ...	314,520
Population—Census, 1921 ... ... ...	129,602
Estimated 1925 for birth-rate ...	129,810
,,     ,,     death-rate ...	129,290
Inhabited Houses (1921) ... ... ...	31,790
Families or Separate Occupiers (1921) ...	32,882
Rateable Value ... ... ... ...	£908,460
Product of a Penny Rate ... ... ...	£3,287

## EXTRACTS FROM VITAL STATISTICS FOR THE YEAR.

		Total.	Male.	Female.
Births. Legitimate ... ...	1849	958	891	
Illegitimate ... ...	95	50	45	
	(Birth Rate 14.3 per 1,000).			
Deaths ... ... ...	1514	758	756	
	(Death Rate 11.7 per 1,000).			
Deaths of Women in Child-birth from sepsis ...	... ...	... ...	... ...	3
,,     ,,     ,,     other causes ...				2
Deaths of Infants per 1,000 births:				
Legitimate 50. Illegitimate 74. ...	Total 51			
Deaths from Measles ... ... ...	... ...	... ...	... ...	13
,,     Whooping Cough ... ...				10
,,     Diarrhoea (under 2 years) ...				2

## STAFF.

Whole time officers of the County Council:—

FRANK ROBINSON, M.D., D.P.H., *Medical Officer of Health and School Medical Officer.*

JESSIE H. GELLATLY, M.D., D.P.H., *Assistant do.*

W. PATON PHILIP, M.C., M.B., ChB., *Tuberculosis Officer.*

J. C. G. EVERED, L.D.S. (EDIN.), *School Dentist.*

G. G. GALPIN, *Chief Clerk, and Enquiry Officer under the Mental Deficiency Act.*

Services in connection with the County Public Health Department are also rendered by the following:—

W. H. HARVEY, M.D., *Bacteriologist.*

L. COBBETT, M.D., F.R.C.S., *Pathologist.*

MISS E. BILLS, *Superintendent of County Nursing Association, and Inspector of Midwives.*

## PHYSICAL FEATURES AND SOCIAL CONDITIONS.

The Administrative County comprises one Urban District, the Borough of Cambridge, and six Rural Districts. The Borough of Cambridge, with a census population of 59,264, in addition to being the seat of the University, is the market town for the County and a railway centre of some importance. The Rural Districts, with a Census population of 70,338, contain 131 parishes, the main industry being agriculture. Fruit growing and market gardening are important industries in a number of rural parishes. Manufactures include a large jam factory, cement making, brickmaking, brewing, paper making and the preparation of chamois leather. There are several printing and publishing works, including the Pitt Press at Cambridge and the Cavendish Press at Foxton.

The general contour of the County area is undulating, rising towards the Southern and Eastern boundaries to a maximum height of some 400 feet, and falling to the level fenlands in the North. A considerable part of the County area, that to the South and East, is on the Chalk formations; to the West and North-West are Gault and Jurassic Clays, while to the North are the fenlands. There are small outcrops of the Lower Greensand. The Chalk, and the Lower Greensand which underlies the Gault Clay, are valuable sources of water supply.

## GENERAL PROVISION OF HEALTH SERVICES.

### HOSPITALS.

*Tuberculosis.*—There is no institution managed by the County Council, but the Council contributed a capital sum towards the provision of the Cambridgeshire Tuberculosis Colony at Papworth Everard and pay maintenance charges for patients received from their area in this institution and also at Addenbrooke's Hospital, Cambridge, which is approved by the Ministry for cases of surgical tuberculosis.

*Maternity.*—There is no maternity hospital provided by a Local Authority, but cases are maintained at Addenbrooke's Hospital, Cambridge, by both Town and County Councils under their maternity and child welfare schemes. There are several small privately managed maternity homes in Cambridge.

*Children.*—There is no children's hospital in the area, but there are wards for children at Addenbrooke's Hospital and the maternity and child welfare schemes include provision for the reception of children into this hospital.

*Infectious Disease.*—Hospitals are provided by the Cambridge Town Council, and by the Chesterton, Melbourn,

and Newmarket Rural Districts for cases from their respective areas. Cases from other Rural Districts are received for payment at the Cambridge Isolation Hospital. There is one small-pox hospital, at Cambridge, and agreements have been entered into for the reception of cases from the rural districts.

*Institutional Provision for Unmarried Mothers.*—The Ely Diocesan Maternity Home make provision in their Maternity Home at Cambridge; cases are maintained by the County Council, who made a capital grant towards establishment.

*Ambulance Facilities.*—Ambulances for infectious cases are provided in connection with the isolation hospitals, and for non-infectious cases by the Cambridge Police and Addenbrooke's Hospital. The British Red Cross Society also provide an ambulance for the rural area.

#### CLINICS AND TREATMENT CENTRES.

*Maternity and Child Welfare.*—In Cambridge, 4 voluntary centres are aided by the Town Council's officers, and there are also two mothers' welfare centres.

There are five privately managed centres in the Rural Districts, at Cottenham, Linton, Sawston, Shelford and Trumpington.

*School Clinics.*—At Cambridge, conducted by the Town Council, (a) for general school medical work, and (b) for dental treatment. There are no clinic premises in the rural area, but the County Council provides travelling clinics for ophthalmic and dental treatment.

*Tuberculosis.*—The Tuberculosis Dispensary for the whole County is provided by the County Council at Cambridge.

*Venereal Diseases.*—The Treatment Centre for the whole County is provided by the County Council at

Addenbrooke's Hospital, Cambridge. It includes separate accommodation in the out-patient department and in-patient beds.

*Professional Nursing in the Home.*—(a) General. There is a District Nursing Association in Cambridge and 39 similar Associations in rural parishes. In view of the midwifery and maternity nursing undertaken by the District Nurses the County assist by grants towards the cost of training and towards the annual expenditure of the Associations in cases of deficiency. In the rural area the District Nurses are also utilised for public health services. Information as to midwives is given in a separate section.

(b) Infectious. Both Town and County Councils make provision for the nursing of such infections of childhood as measles and whooping cough.

*Chemical Work.*—The Local Sanitary Authorities have continued to utilise the services of Mr. West Knights, the Public Analyst, for the analysis of water samples; he has also undertaken analyses under the Sale of Food and Drugs Acts for the Town and County Councils.

*Legislation in Force.*—Information as to Local Acts, etc., will be found in the reports of the Medical Officers of Health for the respective Sanitary Districts. The County Council have acquired legal powers as follows:—

Concurrent powers with the Local Sanitary Authorities under the Public Health (Prevention of Tuberculosis) Regulations of 1925 regarding the handling of milk by tubercular persons.

Adoption of the Notification of Births Act, 1907, for the whole rural area, prior to the passing of the 1915 Act. The Council continue to administer the Maternity and Child Welfare scheme for that area.

## MIDWIVES ACTS.

The County Council are the Local Supervising Authority for the Administrative County, but to facilitate the working of the Maternity and Child Welfare scheme of the Borough of Cambridge, certain powers and duties under the Midwives Act were delegated to the Town Council prior to the Midwives Act, 1918. The services of the County Council's Inspector of Midwives are utilised for inspection purposes.

During the year, 158 routine visits of inspection were paid to midwives by the Inspector, 22 in Cambridge Borough and 136 in the rural area. Special enquiries were also made from time to time as occasion arose, against 47 in the previous year. One enquiry was made during the year into alleged unregistered practice, but no evidence of systematic practice was forthcoming, and the case was adequately met by a caution. One special report was also furnished at the request of the Central Midwives Board.

In this area almost all the practising midwives are trained nurses. The following is the number of women who notified their intention to practise in the years specified:—

		<i>Trained.</i>	<i>Untrained.</i>	<i>Total.</i>
January, 1906	...	24	42	66
„ 1925	...	47	3	50
„ 1926	...	50	3	53

Of the 53 midwives who, in January, 1926, notified their intention to practise throughout the year, 11 reside in Cambridge (all trained), and 42 (39 trained, 3 untrained) live in the rural area. This represents an increase of 3 on the previous year. Altogether 67 notifications were received during the calendar year 1925, some being due to holiday duty undertaken for District Nurses. With three

exceptions, all the trained midwives practising regularly in the rural area are District Nurses.

The rules of the Central Midwives Board now require that after May 1st, 1926, candidates desiring to take the Board's examination for admission to the Roll of Midwives will need to have undergone an extended period of training in midwifery, this period being increased for trained women from four to six months and from six to twelve months in the case of other women. Refresher courses may also be arranged for midwives who are actually engaged in practice, but this provision has not yet been made in this County, though no doubt it would be advantageous.

The County Council are the Local Authority authorised to assist financially in the formation of an adequate midwifery service, and with this object in view they give scholarships for the training of Nurse-Midwives and make grants in aid of District Nursing Associations who employ them. This policy is adopted in preference to subsidising women to act solely as midwives, a matter of difficulty in a scattered rural area, and it has the advantage of encouraging the provision of general nursing for the sick poor at the same time. During the year 2 nursing scholarships of the value of £50 were granted, making a total of 32 scholarships granted since 1913. The estimates for the current financial year make increased provision under this heading owing to the extension in the period of training in the future. Maintenance grants were also made to 4 District Nursing Associations during the year in respect of the services of the Nurse-Midwives in their employ.

Since the Midwives Act, 1902, first came into operation the constitution of the service of midwives in the Administrative County has been transformed, the number of untrained women practising having been reduced from 44 to 3, the number of trained women having, on the other

hand, increased from 24 to 50. This has largely been brought about by the activities of the County Nursing Association, with the financial support given by the County Council in the manner already indicated. During 1925, one new District Nursing Association employing a Nurse-Midwife started work, bringing the number of new District Associations formed since 1913, the year in which the County Association started work, up to 17, thus providing Nurse-Midwives for 44 additional parishes. Cambridge appears to be adequately provided with midwives, and out of 129 rural parishes with a Census population of 70,338, there remain 27, with a combined population of 9,198, for which provision still requires to be made before the midwifery service can be said to be complete.

Apart from intention to practise and change of address, notifications received from midwives numbered 235 against 225 in 1924. They comprised medical help for mother 155, for infant 38, liability to be a source of infection 14, death of infant 3, still-birth 11, laying out the dead 6, and artificial feeding 8. Special investigations were made into any of the cases notified as occasion required, all cases, especially of rise of temperature, infection, death, and inflammation of the eyes being investigated as a routine measure. Of 14 notifications of liability to be a source of infection the midwife proved to have been in attendance on puerperal sepsis in 3 cases and in one doubtful one, in one she had herself suffered from a septic arm and in another she had been dressing a septic wound, while of the remaining 8 cases 6 were instances of exposure to ordinary infectious diseases and 2 were non-septic puerperal conditions. It should be noted that of the 3 definite cases of puerperal sepsis, the midwife only attended in the capacity of maternity nurse in 2 cases, and in the third she had ceased attendance when the symptoms developed.

Of 11 cases of rise of temperature enquired into, 2 proved to be due to puerperal sepsis and one was doubtful. No death of a mother occurred in the practice of a midwife, and the 3 deaths of infants proved to be due to dangerous feebleness at birth. Of 7 cases of inflammation of the eyes of the infant notified 5 were slight and 2 severe, all ending in recovery.

There was a steady increase in the proportion of total births in the Administrative County to which medical aid for mother or infant was summoned by midwives in circumstances of difficulty, the percentage rising from 5.2 in 1919 to 9.8 in 1924 and 9.9 in 1925. Omitting aid for infants from consideration, the number of mothers thus aided in connection with pregnancy or confinement was 155 in 1925, against 160 in 1924. Claims for payment of the doctor's fee under the provisions of the Midwives Act, 1918, were received in respect of 153 cases out of 193 in which the doctor was summoned to attend either mother or infant, as compared with 150 claims received in 1924. All claims are considered by the Midwives Acts Committee and where practicable some portion of the fee is received from the patient. A grant is made by the County Council to the Surgical Aid Association for their services in assessing and collecting payments in Cambridge Borough.

## MATERNITY AND CHILD WELFARE.

The maternity and child welfare scheme for the Borough of Cambridge is administered by the Town Council, and that for the rural area of the County by the County Council.

*Cambridge Borough.*—Under the Notification of Births Act, 1907, there were notified 901 births, or 99.2 per cent. of the total 908 births registered, against 97.8 per cent. in 1924. Of the total notifications, 73.4 per cent. were

received from midwives, 12.1 per cent. from doctors, and 14.5 per cent. from relatives.

The following is a record of the home visits paid by the two Health Visitors.

First visits to Infants ... ... ...	744
Subsequent visits to Infants ... ... ...	2158
Visits to Children 1—5 years ... ... ...	1050
First visits to Expectant Mothers ... ...	80
Subsequent visits to Expectant Mothers	11
Other Cases Visited ... ... ...	1
 Total ... ... ...	 4044

Each of the four Maternity and Child Welfare Centres is in charge of a Lady Superintendent, who is a voluntary worker, assisted by other voluntary workers and by one of the Town Council's two Health Visitors. The centres are open weekly and are attended by a doctor fortnightly. During the year 2,587 attendances were paid by 348 infants, and 1,224 attendances by 216 children aged one to five years. Dried milk, virol, cod liver oil and malt are supplied at the centres at a reduced rate or free, cases being investigated by the Central Aid Society, and assessed within a fixed income scale.

But small use has again been made by expectant mothers of facilities afforded for advice at the Infant Welfare Centres, but useful work is done at the two Mothers' Welfare Centres which hold a weekly session at which instruction in hygiene, health of mothers, children's ailments and clothing, etc., is given. Instruction in mothercraft has now been extended to all the girls' schools.

The Town Council's maternity and child welfare dental scheme entered upon its fifth year of work in 1925,

under the direction of the Public Dental Officer. All expectant and nursing mothers who attend the Infant Welfare Centres, and children under school age, are eligible for treatment at the Dental Clinic. During the year 42 mothers were recommended for treatment, 34 taking advantage of the treatment offered. The work done for the mothers included 320 extractions, 43 fillings and the supply of 24 dentures, while for 172 children 169 fillings and 26 extractions were performed. No charge is made for the treatment of children, but some charge is made to mothers, though the scheme does not aim at being self-supporting.

Under the Town Council's arrangements ante-natal cases may attend the Obstetric Department at Addenbrooke's Hospital, a fee being paid to the Hospital for consultation and report and for each subsequent attendance. The scheme also includes admission to Hospital beds, and 10 women so admitted were maintained during the year. Two private lying-in homes have been approved for the reception of emergency maternity cases or those coming from unsuitable homes, payment being made by the Maternity and Child Welfare Committee. One case was thus dealt with.

*Rural Districts.*—The number of notifications received under the Notification of Births Acts during the year, 1,087, was identical with that recorded for the preceding year, births registered as having occurred during 1925 numbering 1,108, against 1,126 in 1924. After deducting 21 duplicates and 30 stillbirths, there remain 1,036 notified live births, or 93.5 per cent. of the total registered, as compared with 90.7 in 1924.

The proportion of notifications (521) by midwives continued to show an increase, being 48 per cent. compared with 45.9 per cent. in the preceding year, the proportion

notified by medical practitioners (511) decreasing from 48.7 to 47.0, those received from relatives (55) also showing a decrease from 5.4 per cent. to 5.0 per cent. Health Visitors and Masters of Poor Law Institutions also reported for visitation purposes 111 infants who came to their notice during the course of visitation of the homes or on discharge of the mother and infant from an Institution. The interchange of complete monthly lists of registered and notified births with the Registrars continues.

There has been no change in the scheme of home visitation carried out by the staffs of the County and District Nursing Associations for advice with regard to expectant and nursing mothers, infants and young children not yet at school, a branch of educational work of special importance in rural districts where maternity and child welfare centres are developed to a considerably less extent than in the towns. The total home visits paid were as follows:—

	<i>Expectant Mothers.</i>	<i>Infants.</i>	<i>Up to School Age.</i>	<i>Total.</i>
County Health Visitors	88	2739	5709	8536
District Nurses	... 2015	6336	9848	18199
Total for 1925	... 2103	9075	15557	26735
,, 1924	... 1925	8991	15373	26289

These figures continue to show an increase in activity in so far as indicated by visits recorded. Although the number of births registered showed a slight decrease, 84 more visits were paid to infants than in the preceding year, and the total visits paid for supervision of older children not yet at school showed an increase of 184 during the same period, making a nett increase of 268 home visits paid to infants and young children of roughly one to five years.

First visits to infants totalled 1,006, against 1,024 in the previous year.

Although the number of expectant mothers was rather fewer than in 1924, there was an increase of 178 in the number of home visits paid to them. Not only was there a larger total of visits paid, but the number of expectant mothers coming under supervision was actually rather larger, as 524 first visits to expectant mothers were recorded, against 498 in 1924. A very satisfactory feature is the steady increase from year to year in the proportion of expectant mothers coming under home supervision by the Health Visitors, 47 per cent. being visited in 1925, against 20 per cent. in 1918. As this calculation is based on all social classes, considerably more than half the expectant mothers in the wage earning classes must come under visitation.

Children referred by the Poor Law Guardians as having been notified under the Infant Life Protection sections of the Children Act as received by foster mothers for payment are included in the health visitation scheme, 51 children being under supervision during the year in this way. I would repeat the opinion that amendment of the law is needed so as to require that such children shall only be received for gain by foster parents who have been approved and registered by the Local Authority, on premises previously inspected and approved. If the administration of the Poor Law is reorganised on the lines proposed by the Government, the powers and duties of the Guardians as to infant life protection will be transferred to the County Council, who are a statutory Maternity and Child Welfare Authority, and the present system of dual control will be terminated.

The County Council have no Maternity and Child Welfare Centres under their direct control, but give

financial encouragement to voluntarily managed centres. One new centre for Trumpington and Grantchester commenced work during the year, and there are now five such organisations in the rural parishes, of which three receive annual grants in aid from the County Council.

To relieve mothers of domestic anxieties during confinement in their homes and to discourage them from resuming their household duties too early, the Council encourage the engagement of Home Helps through the County Nursing Association, by paying a small annual retaining fee and part or the whole of the remuneration in all cases which need financial assistance. Owing to difficulty experienced in obtaining suitable women, only one Home Help was at work during the year, attending in 8 cases; another started work early in 1926.

There is no officially conducted Maternity Home, the Council preferring to utilise Addenbrooke's Hospital, to which necessitous women are admitted at the charge of the Council at an agreed rate of payment. The cases thus assisted are mainly those where difficulty in confinement is anticipated, but normal cases are also admitted from prejudicial surroundings. The ante-natal reports of the Health Visitors form a starting point for enquiry into cases which *prima facie* might benefit from this form of assistance, while other cases are referred by medical practitioners and by the Hospital for official sanction. Where possible, expectant mothers visit the appropriate Clinic at the Hospital for the opinion of the Obstetric Surgeon, letters of recommendation being furnished by the County Council where required. During the year 9 mothers (including cases of puerperal sepsis) were maintained as in-patients at the cost of the Council, 7 Hospital out-patient letters were given for mothers and 10 for children, while 15 maternity cases were nursed in their homes under the

Council's scheme. Forty-five mothers were referred to the Cambridge and County Surgical Aid Association with a view to assistance in obtaining dental treatment and artificial dentures or for provision of spectacles and surgical appliances.

With a view to the provision of special accommodation for maternity cases a conference was held between representatives of Addenbrooke's Hospital, the Town Council and the County Council. Resolutions were passed generally approving of the provision of a maternity home within the curtilage and under the management of the Hospital, ten beds to be provided in the first instance for such cases as are at present maintained by the Town and County Councils in the wards of the hospital. This matter is still in the stage of preliminary consideration, but no doubt can well be entertained as to the desirability of the development of such a scheme.

The County Council are entitled to fill two of the twelve places provided in the Ely Diocesan Maternity Home established at Cambridge for the reception of mothers with their infants who are without the support of a father. The usual stay is for a period of six months dating from about a month before confinement. During the year the County Council maintained 5 cases, of whom 4 were admitted after January 1st. Great care is exercised by the authorities of the Home in securing satisfactory care for both mothers and infants after leaving the institution.

The supply of fresh and dried milk to expectant and nursing mothers,, infants and young children below school age has again proved a popular and valuable form of assistance. In addition to 41 families actually in receipt of milk at the beginning of the year, 39 fresh families were added to the list after careful enquiry and consideration by

the Maternity and Child Welfare Committee, making a total of 80 families aided in all during some portion of the year, a total identical with that for the previous year. Applications are in some cases made on the advice of medical practitioners, but mainly through the Health Visitors as the result of their home visits. To avoid disappointment it should be understood that the Committee are only able to assist where there is satisfactory evidence of prejudice to health through lack of sufficient nourishment, in addition to necessitous circumstances within the limits of the income scale approved by the Ministry of Health for the area.

For some years past addresses have been given by members of the staff of the Public Health Department at Women's Institutes and Maternity and Child Welfare Centres, on matters concerning the health of mothers and children. In 1925 a direct educational campaign was undertaken on a small scale, the "Motherhood" film being exhibited together with two short dental films, preceded by a brief address on maternal mortality. The films were exhibited in four large villages in which Welfare Centres have been established and were attended by some 300 mothers in all. The general impression gained by personal observation was that the films were greatly appreciated by the audiences, and the opinions expressed by medical men and others who presided goes to confirm this. There can be little doubt that a very useful purpose will be served by arousing interest in other large parishes through similar exhibitions, with a view to paving the way for the formation of maternity and child welfare centres. The greatest assistance was given to the Public Health Department by workers at existing centres in making local arrangements for last year's campaign.

## TUBERCULOSIS.

The following figures are furnished by the Tuberculosis Officer as to new cases of tuberculosis coming to knowledge during the year, whether by notification or otherwise:—

*New Cases.*

<i>Age Periods.</i>	<i>Pulmonary.</i>		<i>Non-Pulmonary.</i>		
	<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>	
0	...	...	—	—	
1	...	...	6	—	
5	...	...	21	20	
10	...	...	16	12	
15	...	...	14	16	
20	...	...	21	23	
25	...	..	44	41	
35	...	...	43	25	
45	...	...	19	17	
55	..	...	10	4	
65 and upwards			5	6	
<hr/>		<hr/>		<hr/>	
Totals	...	199	164	39	
				19	

No action was taken during the year under the Public Health (Prevention of Tuberculosis) Regulations, 1925, or Section 62 of the Public Health Act, 1925.

The County Council provides supervision (but not treatment) in the homes, dispensary treatment and sanatorium accommodation for tubercular persons, whether insured or uninsured, and including ex-Servicemen. All matters relating to the treatment of tuberculosis, including the selection of cases for sanatorium treatment and the management of the Tuberculosis Dispensary are dealt with by a special Tuberculosis Sub-Committee of the Public Health Committee.

*Dispensary and Homes.*—The Tuberculosis Dispensary at 1, Camden Place, Regent Street, Cambridge, serves the whole County area. The specialist staff consists of the Tuberculosis Officer, Dr. W. Paton Philip, and two Tuberculosis Nurses. In addition to consultations at the Dispensary the homes of the patients are visited periodically for supervision and advice. The volume of work undertaken at or in connection with the Dispensary during the year is indicated by the following figures:—

1. Cases examined or treated were as follows:—

			Cambridge.	Rural.	Total.
New Cases	...	...	328	244	572
Old	,,	...	954	993	1947
			1282	1237	2519

2. Visits of Patients to Dispensary:—

			Cambridge.	Rural.	Total.
Insured Persons	...	...	554	310	864
School Children	...	...	111	70	181
Other Uninsured Persons	...	...	528	127	655
			1193	507	1700

3 Visits to Homes:—

(a) *Tuberculosis Officer:*—

			Cambridge.	Rural.	Total.
Insured	...	...	34	1059	1093
School Children	...	..	24	258	282
Other Uninsured	...	...	104	183	287
Total 1925	...	...	162	1500	1662
,, 1924	...	...	166	1965	2131

(b) *By Dispensary Nurses:*—

			<i>Cambridge.</i>	<i>Rural.</i>	<i>Total.</i>
Insured	..	...	390	316	706
Uninsured	..	...	755	443	1198
Total	1925	...	1145	759	1904
,,	1924	...	1295	578	1873

(c) *By General Nursing Staff:*—

			<i>Cambridge.</i>	<i>Rural.</i>	<i>Total.</i>
Insured	..	...	—	670	670
Uninsured	..	...	—	730	730
Total	1925	...	—	1400	1400
,,	1924	...	—	1301	1301

## Grand Total home visits:—

1925	..	...	1307	3659	4966
1924	..	...	1461	3844	5305

Co-operation is secured with the officers of the Local Sanitary Authorities, who are informed of the results of visitation following on notification. Special attention is drawn to structural and other sanitary defects reported, and information is given concerning movements of patients and deaths, as affording opportunity for disinfection. As regards sputum, the County Council provide bacteriological examination, while the District Councils furnish receptacles.

Interchange of information is carried on between the officers of the Local Education Authorities and the Tuberculosis Dispensary as regards school children. Advice is given by the Tuberculosis Officer as to diagnosis, school attendance and institutional treatment. Attention is drawn by the authorities of Addenbrooke's Hospital to patients

considered to be in need of sanatorium treatment. Poor Law patients are referred for the opinion of the Tuberculosis Officer, who also undertakes consultations in respect of ex-Service men, and furnishes reports with regard to them to the Ministry of Pensions.

Co-operation with the medical practitioner is secured by the Tuberculosis Officer through consultation as to notified and suspected cases and communication of the clinical findings and advice. Practitioners are particularly encouraged to attend at the Dispensary in the interests of their patients, and a considerable number of them do so, especially for X-rays examinations. In doubtful cases the Tuberculosis Officer intimates the position to the practitioners by correspondence, the patients are followed up by the Dispensary staff, and further visits to the Dispensary are secured to clear up the diagnosis. As regards insured patients it is found that the prescribed forms are not popular with the practitioners, who prefer correspondence by private letter.

Every effort is made by the Tuberculosis Nurses to secure the attendance of home contacts at the Dispensary for examination. In the more distant villages such examination is more commonly undertaken in the homes, or travelling expenses to the Dispensary for X-ray examinations are defrayed where necessary.

As aids to diagnosis, bacteriological and X-ray work are carried out by the Dispensary staff. Specimens of sputum examined bacteriologically during the year numbered 83, the tubercle bacillus being found in 12 specimens. Increasing use has been made of X-rays diagnosis, 1,353 such examinations having been made in 1925. Of these, 737 were screening only, while a film was developed in 616 cases.

Dental treatment at the Dispensary was commenced in 1924 and continued through 1925, when 20 patients, who made 68 attendances, received treatment by the County School Dentist on Saturday mornings. During the year, the County Council resolved to assist financially in the provision of artificial dentures for 10 patients.

A special report on light treatment for non-pulmonary tuberculosis was considered, and it was resolved:—

1. “That cases of lupus, which are few in number, be sent to the London Hospital for the present, the consent of the Ministry of Health being obtained.” This was commenced towards the end of the year for 3 cases, and is continuing.
2. “That cases of tuberculosis of the bones and joints receive treatment in residential institutions where general light treatment is available, as at Lord Mayor Treloar’s, Alton.” This also is in operation.
3. “That as a future policy for other surgical cases such as cervical gland tuberculosis, treatment at a local light centre of an out-patient nature be aimed at.”

Assistance is given by the Council in the purchase of appliances for surgical cases of tuberculosis, based on the financial circumstances of the individual case.

The arrangements for “care” and “after care” include the provision of extra nourishment for tubercular children, this taking the form of milk or malt and cod liver oil. This form of assistance was given in 33 cases during the financial year. The general “care” arrangements are carried out partly by the Dispensary organisation and partly by the Cambs. Tuberculosis After-Care Association. The Tuberculosis Officer is the Medical Adviser to this Association, and the County Council are represented on the Executive Committee in view of a grant made by them of

£100 per annum, mainly for the provision of extra nourishment for adults. Touch is kept with employers generally throughout the County as part of the ordinary work of the Dispensary or Association, in the interests of patients discharged from sanatorium, as regards the nature of their work and especially as regards the hours of employment. Through the medium of the Association the earnings of insured persons are supplemented by Friendly Societies while undertaking light part-time work. The Association also secures financial contributions, has assisted in providing nursing, has aided workers in the expense of travelling to and from their employment, and has helped financially in the care of the young family while the mother is in sanatorium.

As Cambridge is an agricultural County and there is only one large factory in the area, special occupational incidence has not been noted. The difficulty of the return of patients from sanatorium to unsuitable houses is experienced here as elsewhere. Wherever possible, open-air shelters are lent by the Council, who purchased six new shelters with bedding outfits during the year, bringing the number acquired up to 147. Their use is reported upon by the Health Visitors at their visits to the homes.

*Sanatorium Accommodation.*—The provision made by the County Council for civilian patients is for both insured and uninsured persons, including children. Preferential accommodation is found for ex-Service men, for whom the Treasury accept full responsibility. The following table shows that in addition to 20 ex-Service men, 81 insured persons (50 men, 31 women), 29 uninsured adults (7 men, 22 women), and 51 children were admitted to Sanatoria during the year, making a total of 181 admissions, 20

ex-Service and 161 Civilian.

	<i>In Sanat.</i>	<i>Admitted.</i>	<i>Discharged.</i>	<i>Total</i>
	Jan. 1st,			Treated
	1925.			

**Men:**

Ex-Service	...	25	20	32	45
Insured Civilians	...	37	50	54	87
Uninsured	...	5	7	2	12

**Women:**

Insured	...	22	31	36	53
Uninsured	...	11	22	20	33
Children	...	45	51	69	96
	—	—	—	—	—
Total in 1925	145	181	*213	326	—
	—	—	—	—	—

\* Includes 17 deaths.

The County Councils do not themselves manage a sanatorium, but pay for the maintenance of their patients in existing institutions. The men are almost all accommodated at the Papworth Tuberculosis Colony, where also some women and children are admitted. Reserved beds (77) are as follows:—

Papworth Tuberculosis Colony. Beds reserved for men, 30. All stages of pulmonary tuberculosis; also surgical cases.

Bramblewood, Holt. Beds for women, 14. Pulmonary cases, excluding advanced cases.

Oak Bank, Kent. Beds for children, 16. Early pulmonary cases.

Ipswich. Beds for children, 5.

Children's Sanatorium, Holt. Beds for children, 12. Early pulmonary cases.

Smaller numbers of pulmonary cases are sent, without

reservation of beds, to such other institutions as Wyton (Hunts.) and Ventnor. Unreserved accommodation is obtained for surgical cases at Addenbrooke's Hospital, Cambridge, mainly for operative treatment, and to Lord Mayor Treloar's Hospital, Alton, for conservative treatment. The precise figures for the year are shown in the following table:—

	<i>Male</i>				
	<i>Ex-Service.</i>	<i>Civilians.</i>	<i>Women.</i>	<i>Children.</i>	<i>Total.</i>
Cambs. T. Colony	14	46	16	—	76
Bramblewood ...	—	—	27	—	27
Holt (Children's)	—	—	—	17	17
Wyton ... ...	—	—	3	2	5
Ipswich ... ...	—	—	—	5	5
Addenbrooke's					
Hospital ...	6	7	6	9	28
Oak Bank ...	—	—	—	17	17
Treloar's ...	—	—	—	1	1
Ventnor ... ...	—	3	—	—	3
Hunstanton ...	—	1	—	—	1
London Hospital	—	—	1	—	1
	20	57	53	51	181

## VENEREAL DISEASES.

The County Council's scheme for combating venereal diseases includes arrangements for pathological diagnosis, treatment at the centre conducted at Addenbrooke's Hospital, Cambridge, the supply of special drugs to medical practitioners experienced in their use, and propaganda work undertaken by the Cambridgeshire Branch of the British Social Hygiene Council. The scheme appears to be adequate to the needs of the area.

*Treatment Centre.*—The constituent Authorities for the treatment centre at Addenbrooke's Hospital are the Cambridgeshire, Isle of Ely, and Huntingdonshire County Councils, but patients are dealt with from other areas also. Any person is entitled to receive treatment free of charge, and can obtain particulars as to hours of attendance by application to the County or District Medical Officers of Health. Afternoon and evening clinics are held weekly for both sexes, at separate hours, and six beds are reserved for in-patient treatment. Facilities are afforded for irrigation of cases of gonorrhœa between clinic days, and are mainly taken advantage of by male patients. It will be seen from the figures furnished in Table 1 that of 922 attendances on intermediate days, only 70 were made by females, against 852 by males.

In a small County area it is not a difficult matter for the facilities for treatment to become generally known. The medical practitioners have been acquainted, the information furnished by Health Visitors in their ante-natal reports is made the basis of enquiry and information, and information is also given to the public in the course of the propaganda campaign. The small number of cases of ophthalmia neonatorum and of blindness due to that condition suggests that the prevalence of gonorrhœa is probably below the normal, while the attendance figures furnished by the treatment centre indicate an increased use by the public of the facilities afforded.

The work done at the treatment centre during 1925 is summarised in the following tables:—

TABLE I.

		<i>Male.</i>	<i>Female.</i>	<i>Total.</i>
Under treatment on				
January 1st, 1925	...	60	40	100
Old cases readmitted	...	31	15	46

	<i>Male.</i>	<i>Female.</i>	<i>Total.</i>
New patients during 1925	118	69	187
Total under treatment ...	209	124	333
Venereal Disease ...	194	103	297
Not Venereal Disease	15	21	36
Left without completing treatment ... ...	70	30	100
Completed treatment but not final tests ... ...	7	2	9
Completed treatment and tests ... ... ...	58	28	86
Transferred to other Treatment Centres ...	5	5	10
Under treatment at end of year ... ... ...	54	38	92
*Out-patient attendances:			
(a) On clinic days ...	1170	815	1985
(b) On intermediate days ... ...	852	70	922
(c) Total ... ...	2022	885	2907
Aggregate "in-patient days" ... ...	309	736	1045

TABLE II.

	<i>Other.</i>	<i>Total.</i>	<i>Total.</i>
	<i>Cambs.</i>	<i>Counties.</i>	<i>1925.</i>
			<i>1924.</i>
New out-patients during 1925 (for first time) ...	115	72	187
*Total out-patient attendances ...	2212	695	2907
Aggregate in-patient days ... ...	516	529	1045
Doses of salvarsan substitutes ...	753	306	1059
			1054

TABLE III.  
CAMBRIDGESHIRE PATIENTS.

	1925.	1924.	Increase or Decrease per cent.
New out-patients ...	... 115	106	+ 8
*Total out-patient attendances	... 2212	1834	+ 21
Aggregate in-patient days	516	683	- 24

\*These figures include 922 intermediate attendances for irrigation, etc., paid by Cambridgeshire patients.

Since the treatment centre was first opened in 1917 it has been attended by 1,689 patients, who have made 15,065 attendances on clinic days. Of these, 1035 were Cambridgeshire residents, who attended 9,723 times on the days on which the medical officers were in attendance. These figures do not include intermediate attendances for irrigation, which in 1925 alone numbered 922, all paid by Cambridgeshire patients, who live comparatively close to the Treatment Centre.

A decrease in the work of the Centre as a whole during the years 1921 to 1923 was followed by an increase in 1924. The figures in the preceding tables show a further increase during 1925 both as regards patients and attendances. Cambridgeshire patients considered separately show an increase of 8 per cent. in actual new patients, and of 21 per cent. in total attendances made by them, including intermediate attendances for irrigation. The whole of the increase in attendances appears to be attributable to Cambridgeshire patients, and is mainly, though not entirely, due to increased use of the facilities for continuous treatment of gonorrhœa cases between the fixed clinic days. This is a satisfactory feature as affording greater oppor-

tunity for a complete cure, but it is clear that this advantage is only shared to a small extent by women patients. At some centres this disproportion appears to have been reduced by the services of an almoner, a point which is worthy of consideration.

Based on new patients, the 11.2 attendances per head paid by Cambridgeshire patients on fixed clinic days shows practically no change, but, if attendances on intermediate days are included, the record shows an increase from 16.4 visits per patient in 1924 to 192. per patient in 1925.

There are 8 medical practitioners in the area approved for the free supply of arsено-benzol compounds for the treatment of syphilis, but the great bulk of this special form of treatment is carried out by the medical staff of the Treatment Centre.

*Laboratory Diagnosis.*—Under the Council's scheme specimens are examined free of charge to medical practitioners by pathologists holding University posts. During the year 324 specimens were tested by the Wassermann reaction for syphilis, and 253 were submitted for bacteriological examination, as against 362 and 242 specimens respectively in 1924. Of these 560 specimens were sent from the treatment centre and 17 by private practitioners. The total number of specimens examined since the scheme was first instituted in 1917 is 3,159 for the Wassermann reaction, and 2,538 for bacteriological examination.

*Propaganda.*—The County Council have now for nine years undertaken propaganda work through the agency of the Cambridgeshire Branch of the National Council for Combating Venereal Disease, now known as the British Social Hygiene Council, to which body they make an annual grant. Encouraged by the experience of the previous year, the

Executive Committee of the Branch arranged for a further series of film displays and lectures in Cambridge and the Rural Districts. The films were obtained from the headquarters of the British Social Hygiene Council, and the introductory lectures were given by Mr. C. M. Kohan, a lecturer on their staff. Seven exhibitions were given in Cambridge, attended by 650 people, followed by five exhibitions in large villages, attended by 1,300 people.

The films were shown to mixed audiences of persons over 16 years of age. In Cambridge two of the showings were limited to men, special films being exhibited. The bad weather and the fact that propaganda on these lines is now somewhat familiar to Cambridge audiences caused a falling off in the size of the meetings, and it is intended that the next campaign in Cambridge will be on somewhat different lines. In the villages good audiences were again drawn and keen attention and interest were met with, suggesting that the present methods may still be continued with advantage in villages not yet visited. In both town and country the propaganda was well received and high appreciation was expressed by various chairmen, including clergymen, doctors, and a schoolmaster. An additional feature was the exhibition, by special request, of a biological film at the Homerton Training College for Women Teachers and at the County School for Girls, 500 persons in all attending.

*Venereal Diseases Treatment Act, 1917.*—Nothing came to light during the year calling for action under the Act, which prohibits treatment of these diseases by unqualified persons and improper advertisement of specifics for treatment.

## BLIND PERSONS ACT, 1920.

The County Council are the registration authority under the Act, and the duty of keeping the register of cases is carried out for them by the Eastern Counties' Association for the Blind. During the year just ended, 23 additional names have been placed on the register, 11 resident in Cambridge and 12 in the rural area. The total number now recorded is 180 (Cambridge 94, rural area 86), including cases in institutions. Of this total, 40 are in receipt of old age blind pensions, 51 of old age pensions, and 15 of pensions from other sources.

The further duties of the Council, apart from the responsibilities of the Education Committees in the area, are entrusted to the Cambridgeshire Society for the Blind, a grant of £250 per annum being made by the County Council in respect of services rendered. As the work has expanded this is now represented to be inadequate, and an increased grant will be recommended to the Council. The principal functions of the Society are to promote the social welfare of the blind generally, to make applications for pensions for those who are eligible and for grants from Poor Law Guardians in necessitous cases, and to secure work for the blind in their homes, enabling them to obtain materials and dispose of the finished articles as advantageously as possible.

In a scattered rural County, the chief work of such a Society is in the homes, and in pursuance of this, 2,753 visits were paid during the year by the two official Home Workers, 1,515 in Cambridge and 1,238 in the villages. The latter figure shows a further increase in activity in the rural area which is obviously the more difficult problem and necessarily involves expense in travelling. Assistance is also given by seven voluntary workers.

An important part of the work by the Society is to keep blind people employed and self-supporting as far as possible. The two Home Workers give instruction to 12 blind persons in such practical work as Braille-copying, chair caning, raffia work, cloth rug making, rush seating, and basket making. There are 17 approved blind home workers. To assist in disposing of the articles made by the blind a sales depot is maintained at Emmanuel Street, Cambridge, on which some loss is incurred. The same difficulty appears to be shared by other County areas, and though disposal of made articles does not appear to be an economic proposition, the scheme serves the purpose of assisting blind persons to lead a useful and self-respecting existence instead of one of entire dependence on other people. The Society have also recently been asked by the Ministry to evolve a scheme of subvention of the unemployable blind. As this involves expenditure, the question will first be brought before the County Council for their consideration.

## MENTAL DEFICIENCY ACT.

Special reports presented during the year included 32 cases newly notified under the provisions of the Mental Deficiency Act. Of these 7 were notified as "neglected" (3 by the Cambridgeshire Voluntary Association, 1 by the Poor Law Guardians, and 3 privately), 18 by the Borough and County Education Committees, 1 by the Voluntary Association, 3 by the Cambridge Poor Law Guardians and Board of Control, and 3 privately. One of the foregoing was notified later by the Police, and dealt with by the Cambridge magistrates.

The instructions given regarding the foregoing new cases were as follows:—

Certified Institutions on petition ... ...	8
„ „ on Order of Court ...	1
Certified Institution under permissive powers	1
Statutory supervision ... ... ...	17
Referred for voluntary supervision ...	1
Not subject to be dealt with ...	4
	—
	32
	—

Of the 9 defectives in respect of whom petitions for certified institutions were ordered to be presented, 5 were admitted in 1925, 3 in 1926, and one is awaiting presentation of petition. Three defectives were also admitted in 1925 regarding whom instructions had been given in the previous year. The number therefore actually admitted to certified institutions during the calendar year 1925 was 8. During this period 3 defectives died, and 3 were allowed out on leave of absence. Of the cases placed under statutory supervision 2 were regarded as suitable for certified institutions and one for Guardianship, but in one case the petition was dismissed and for other reasons the decision was subsequently varied in the other cases.

Since 1913, when the Council first began to administer the Act, 309 persons had been brought to their notice by the end of 1925. Of these, 87 have been placed under statutory supervision undertaken by the Voluntary Association, 131 have been sent to Institutions, and 7 have been placed under Guardianship. Allowing for deaths, discharge to homes and transfer to mental hospitals and other institutions, there remained at the end of the year under review, 102 cases who were being maintained in

institutions (includes 6 on licence and 3 in State institutions), 2 under Guardianship, and 79 under statutory supervision in their homes, making a total of 183 under the control of the Local Authority.

During the year figures were furnished to the Committee which purported to show that 662 defectives were known to exist in the County, of whom 180 were under some form of control by the Local Authority under the Mental Deficiency Act, 10 children in Fulbourn Mental Hospital, 23 children in special schools, and 449 not under control. Great difficulty is now experienced in gaining places for defectives in institutions and additional accommodation is a very urgent problem.

The defectives under Order are being maintained in about 10 institutions in various parts of the country, the largest number (51) being in the Royal Eastern Counties Institution, Colchester, which has been of the greatest service to this County, which is within the area normally served by the Institution. Reference was made in last year's report to negotiations with the Essex and East and West Suffolk County Councils for enlargement of this institution, a Joint Committee being appointed to draw up a scheme. This Joint Committee negotiated terms with the Directors of the Institution under which the latter would provide 444 new beds, the work to be carried out under the supervision of the Joint Committee. Of these beds, 34 were to be allocated to Cambridgeshire, who would pay their proportion of the total cost of extension on that basis, the new beds to be allocated in perpetuity. The County would have representation on the Management of the Institution, and would pay an agreed maintenance charge for its cases. This appears a very advantageous arrangement, as, in addition to the new beds, the County

will still hold the places already occupied, which were otherwise likely to have been lost in course of time.

The financial grant to the Cambridgeshire Voluntary Association was continued during the year, the Association assisting the Council materially by undertaking supervision of defective persons in their homes, by providing escorts to institutions, and assistance in finding places of safety. They also assist in ascertainment, and by reporting to the Statutory Committee when defectives appear subject to be dealt with under the provisions of the Mental Deficiency Act.

## ISOLATION HOSPITALS.

The Borough of Cambridge and the Chesterton, Melbourn and Newmarket Rural Districts, each have their own isolation hospital. Cases from the Caxton, Linton and Swavesey Rural Districts (total population 19,794), which have no isolation hospital, as well as from certain of the other districts when their beds are fully occupied, are admitted for payment to the Cambridge Isolation Hospital. The financial position still stands in the way of steps being taken for remedying the deficiency in the Rural Districts by a combined scheme, regarding which conferences have in the past been held with the District Councils.

Annual grants are made by the County Council towards the upkeep of the Cambridge, Newmarket and Melbourn Isolation Hospitals. These were inspected during the year and grants amounting to £794 were approved by the County Council for payment.

The Cambridge Isolation Hospital is a permanent structure of 62 beds, including a cubicle block; several diseases can be accommodated at once. During the year,

the laundry machinery was modernised and the installation of electric light in the wards was contemplated.

Royston Isolation Hospital serves the Melbourn Rural District jointly with the Ashwell Rural District (Herts.). It is a permanent structure of one ward pavilion and separate home for the staff; it can only accommodate one disease at a time and is practically limited to the reception of scarlet fever.

Exning Isolation Hospital serves the Newmarket Rural District (Cambs.) jointly with Moulton Rural District (West Suffolk). It is a permanent structure of one pavilion comprising four small wards, a small observation block of two rooms, and a separate home for the staff. Twenty beds is suggested as the maximum number which should be in use at one time, but the hospital is also largely used by Newmarket Urban District (West Suffolk), the combined population thus served exceeding 30,000. There can be no doubt that overcrowding has occurred in this hospital. The accommodation for the staff is inadequate and the observation wards are in consequence used as sleeping quarters for the staff, the hospital being thus deprived of very necessary accommodation for doubtful cases of disease. The County Council have urged the Joint Hospital Committee to provide additional accommodation for their staff, and the matter has been referred to the Ministry of Health.

At Oakington, the Chesterton Rural District is served by a small hospital of one temporary pavilion and a separate permanent structure to house the staff. Only one disease can be accommodated at a time.

There is one small-pox hospital in the County, a temporary structure provided by the Cambridge Town Council. It contains 8 beds with provision for rapid

expansion. All the Rural Districts have entered into agreements with the Town Council for the reception of their cases if circumstances permit.

## SCHOOLS.

The work of the School Medical Service in the County Elementary Education area is dealt with fully in the annual report to the Education Committee.

The policy generally followed for the control of infectious disease is that of exclusion of the individual child, schools only being closed where special circumstances exist. By arrangement with the local Medical Officers of Health, all closure certificates are furnished by the School Medical Officer and a uniform policy is thus secured. The Committee's regulations secure report by the Head Teachers of absentees from infectious disease, and these are systematically enquired into by the School Nurses, with the exception of those dealt with by the Local Sanitary Authorities. For this purpose the School Nurses paid 2,832 home visits in 1925.

The most serious feature was the wide prevalence of measles and whooping cough, which commenced in 1924 and continued through 1925. These, with outbreaks of mild but highly infectious ailments such as mumps and chickenpox, accounted for an incidence of infectious disease in the schools much above the normal. There was but little difference from the previous year in the prevalence of diphtheria and scarlet fever, and it is satisfactory to have again to record a very low incidence of diphtheria, this making the fifth year of continued decrease among children in the public elementary schools. No closure of schools was necessary in 1925 for this disease, notifications regarding school children being limited to 10 families during the

year. Scarlet fever also only caused three closures during the same period, and it is worthy of note that cases continued to arise on the reopening of several schools after the long closure for the summer holidays, thus demonstrating that this measure of control is not necessarily as effective as might be supposed.

The Buildings Sub-Committee have been constantly engaged on matters relating to the sanitary condition of school premises and have been able to effect considerable improvement in the Council Schools. There still remain, however, a few Council Schools in which the offices are not of a sufficiently modern type; also, although the provision of ventilation is generally very satisfactory for the colder months, alterations are needed to meet summer requirements. Improvements have also been effected in some of the Non-Provided Schools for which the Education Committee are not directly responsible structurally, but their hygienic standard generally is considerably below that of the Council's Schools. Survey reports by the County Architect have been under consideration by the Committee, and the Board of Education have communicated their views regarding those schools which they consider most urgently in need of attention to the fabric. Substantial improvements have been effected in some instances and others are still the subject of negotiations with the responsible managers. Common defects are inadequate or unsuitable means of ventilation, consistently low temperatures from unsatisfactory heating arrangements (leading naturally to the closing of windows), and an antiquated type of closet. That improvement has been effected as regards the type of closet, is shown by the fact that while in the year 1909 privy pits existed in more than 40 per cent. of the schools, the proportion in the Non-Provided Schools so far reported upon by the County Architect in which this type persists was

reduced to 28 per cent., but it is obvious that much still remains to be done. The lack of proper provision for washing purposes is particularly unfortunate in view of the obvious educational value of adequate facilities on the premises for securing personal cleanliness among the children, especially those who live at a distance.

## INSPECTION AND SUPERVISION OF FOOD.

*Milk Supply.*—No fresh applications for licences for the sale of graded milks appear to have been received during the year. The Cambridge report shows that 24 samples of certified milk and 36 of ordinary milk were submitted for bacteriological examination. With four exceptions the former complied with the Ministry's standard of cleanliness, but only four samples of ordinary milk appeared entirely free from dirt.

None of the local reports show that the tubercle bacillus was detected in connection with the milk supply during the year and no reference was made to the County Council for action under this heading under the provisions of the Milk and Dairies (Consolidation) Act of 1915. The County Council have not thought it necessary to set up a system of milk sampling for the detection of the tubercle bacillus, but judging from experience up to the present it would not appear that any frequent application is likely to be made to them by the Local Sanitary Authorities for exercise of their powers, and that such a sampling scheme will prove necessary if these powers are to be of value.

As regards milk premises, any detailed observations in the local reports go to show that the chief difficulty is experienced as regards cleanliness, and this principally with

owners of small herds, who plead that their means are inadequate to enable them to carry out the reconstruction which is considered necessary if their cowsheds are to be rendered structurally fit for the production of clean milk. There is a general feeling that there is improvement, but it is obviously slow.

*Meat.*—There is no public abattoir within the County area. The Cambridge figures especially point to frequent visitation of private slaughter houses, and in the rural area figures given show that a considerable number of carcases were inspected in the Newmarket, Melbourn and Swavesey Rural Districts as the result of the requirements to notify the Inspector of times of slaughter under the provisions of the Public Health (Meat) Regulations of 1924. The other rural reports afford no guide as to activity under this heading. It is frequently noted that it is difficult, if not impracticable, to visit all premises after reception of notifications of intention to slaughter, in a scattered rural district.

Meat condemned in Cambridge amounted to about 77 cwt. of beef and pork, 3 cwt. of fruit, and smaller quantities of other foods. In Melbourn Rural District four whole carcases and 27 parts were condemned, and some eight tins of food were voluntarily surrendered and destroyed in Newmarket Rural District.

Several of the reports make specific reference to endeavours by the Local Authorities to secure improvements to the premises of meat vendors under the 1924 Regulations. In Cambridge all the butchers are said to have complied, many making alterations to the shop fronts for the protection of meat. In Newmarket and Melbourn Rural Districts glass windows or wire gauze have been provided for the purpose.

## SALE OF FOOD AND DRUGS ACTS.

*Rural Area.*—In this area the Acts continue to be administered by the County Police. The total number of samples taken and reported upon by the Public Analyst was 171 (203 in 1924), of which 133 were taken formally and 38 informally. The samples were:—Fresh milk 63, butter 23, margarine 10, lard 11, cocoa 8, tea 4, coffee 6, sugar 8, flour 10, bread 8, rice 4, and smaller numbers of other articles.

Of the 171 samples analysed, 6, or 3.4 per cent., proved not to be genuine, compared with 1,533 samples analysed during the ten years 1915-24, of which 81, or 5.3 per cent., were non-genuine. Of the 63 samples of fresh milk, 61 were taken formally. The particulars as regards adulterated milk samples are as follows.—

1. Deficient 30 per cent. in fat. Vendor prosecuted, convicted, and fined £5 and costs.
- 2 and 3. Deficient in fat 13 and 38 per cent. No proceedings, as these were “ appeal to the cow ” samples.
4. Deficient 10 per cent. in fat. Proceedings taken, resulting in conviction with fine of £2 and 15/- costs.
5. Deficient 6 per cent. in fat. No proceedings taken; vendor cautioned.
6. Added water, 7 per cent. Proceedings taken and case heard in January, 1926, when no conviction was recorded, though the Bench were satisfied that the case was proved, and defendant was ordered to pay 4/- costs. On subsequent proceedings, the vendor's stockman was convicted and fined £3.

*Cambridge Borough.*—Samples taken for analysis numbered 264 (257 in 1924), comprising 234 informal and 36 formal samples. The principal items were:—Milk 179, condensed milk 8, butter 7, cream 6, sago 6, margarine 4, lard 4, and coffee 5. Of the 45 other articles sampled, the number of samples in no case exceeded four. The percentage of non-genuine samples, 10 in number, was 3.8.

For purposes of economy in administration, all informal samples of milk were centrifugalised, and the 5 samples found to be below the 3 per cent. fat standard were followed up by formal samples. Legal proceedings were taken in respect of two samples of milk for added water, one case being withdrawn and the other dismissed. On appeal to High Court regarding the latter case, a rehearing was ordered, and this resulted in conviction with a fine of £10. Convictions, with fines of £1, were obtained in two cases in which tapioca was sold for sago.

Seven samples of milk were taken in course of delivery.

*Use of Preservatives.*—In both urban and rural areas the Public Analyst examines for preservatives all samples taken under the Sale of Food and Drugs Acts which are likely to contain them. In the rural area boric acid was found to the extent of 0.30 to 0.40 per cent. in 7 samples of butter, and in quantities varying from 0.30 to 0.50 per cent. in 10 samples of margarine.

In Cambridge Borough no preservatives were found in any of the 26 samples of milk and 2 of cream examined. The preservative was estimated in 4 samples of preserved cream.

## SANITARY CIRCUMSTANCES.

### WATER SUPPLY.

The chief geological formations from which water is derived in this County are the Lower Chalk and Lower Greensand. The Middle and Lower Chalk outcrop over a considerable area in the Melbourn, Linton, Newmarket, and Chesterton Rural Districts, and are valuable sources of supply where not contaminated by surface pollution. The Lower Greensand is a water-bearing stratum of great importance, being protected by the overlying impermeable Gault Clay. It yields an excellent supply from borings in villages in the Caxton and Arrington, Chesterton, Newmarket and Melbourn Rural Districts, and from wells in Cambridge and the neighbourhood. The Jurassic Clays outcrop in the North-West of the County in the Caxton and Arrington, Chesterton and Swavesey Rural Districts; water from these strata is limited in quantity and uncertain in site. Boulder Clay covers a wide area of the Caxton and Arrington Rural District and the high lands to the South-East of the County; in Linton Rural District, springs or wells in the Boulder Clay are said to be the only available sources of supply. The water yielded is usually very hard, and may be brackish. In certain parishes in the Chesterton, Swavesey and Caxton and Arrington Rural Districts a supply is obtained from Gravels. For houses in isolated situations, rain water may be the only source of supply. Occasionally ponds or lodes are the local source of supply, while shallow wells in the cottage gardens are frequently met with.

Public piped supplies are limited in number. The Cambridge University and Town Waterworks Company supplies Cambridge and some ten surrounding villages in the Chesterton Rural District with water pumped from

deep wells in the Chalk and Lower Greensand, mainly the former. In Chesterton Rural District the Cottenham Water Company supplies Cottenham and Rampton from the Lower Greensand, while Madingley has a piped supply from the same stratum. Willingham Water Company supplies Willingham with a constant service system from the gravel, while Longstanton has a mained service from a similar source. A supply is furnished by the East Hunts. Water Company from a boring in the Lower Greensand, and is piped to the villages of Bourn, Knapwell, Longstowe, Caxton, Elsworth and Papworth Everard in the Caxton and Arrington Rural District, and to parts of Swavesey, Conington and Fen Drayton in Swavesey Rural District.

There are several mained supplies in Newmarket Rural District all of which are derived from deep tubed Chalk wells. Cheveley, Wood-Ditton and Saxon Street are supplied from such a well at Saxon Street, Soham from a deep well from near Fordham, Stetchworth from a local deep well, while a few houses in the parishes of Wood-Ditton and Cheveley are supplied by the Newmarket Waterworks Company. Work is proceeding on the scheme sanctioned by the Ministry for the supply from the Chalk of the parishes of Dullingham, Westley Waterless, Burrough Green and Brinkley, and it is expected that the works will be completed during the summer of 1926. There are no piped public supplies in the Melbourn and Linton Rural Districts.

The majority of the rural parishes depend for their public supply upon a well in the village sunk in one of the strata above named, from which water is raised by hand, and there is often a considerable distance for water to be carried to individual houses. Some parishes are devoid of any public supply, and mention may here be made of the parish of Fordham in the Newmarket Rural

District which attracted some attention in the London press during the year. Adverse reports were also furnished by the Medical Officers of Health for the County and the Rural District, there being no public supply and many of the private wells being undoubtedly polluted. The need for a public supply was recognised by the District Council many years ago, and the main for the adjoining parish of Soham was so constructed as to permit of a branch main being subsequently laid for the supply of Fordham. The matter has been brought to the notice of the Ministry of Health, and it is to be hoped that an adequate scheme will before long be agreed upon. The supply of the parish of Bottisham in the same sanitary district is also an old-standing problem awaiting solution.

In Chesterton Rural District a new public well has been bored to the Lower Greensand at Milton and similar provision has been decided upon at Horningsea. More satisfactory supplies at Bottisham Lock and Comberton are under consideration and it is understood that certain owners will provide wells to supply part of Newton. Ninety-four per cent. of the population of the Sanitary District reside in parishes in which a public supply has been provided.

During the year the County Public Health and Housing Committee considered the memorandum of the County Councils Association on rural water supplies, together with the views of the Rural District Councils, and on their recommendation the County Council resolved that:—

1. The area of a Rural District Council is generally too small to make a satisfactory area for a water supply authority.
2. The cost of water supply should be spread over a large area than the Parish and Rural District, provided that

those parishes which already have been specially rated for their own supply be given credit for amounts already paid.

3. The limit at which water supply to houses may be enforced by Rural District Councils is too low.

4. There should be some statutory power for a local authority to take steps to prevent water from being allowed to run to waste.

## SEWAGE AND REFUSE DISPOSAL.

*Sewerage.*—Cambridge is sewered on the partially separate system. The sewage is dealt with on the sewage farm of 177 acres, where, after passing through detritus and settling tanks it is distributed on the land, the effluent eventually being discharged into the Cam.

In the rural area, conservancy methods are universally met with. Apart from the Cambridge Sewage Works the only works are those of the Histon factory in Chesterton Rural District, a water carriage system at Stetchworth in Newmarket Rural District, the installation in the Linton Rural District at the R.A.F. Station near Duxford, and small works at Sawston. In the larger villages throughout the rural area it is common for house drains to communicate with the surface-water drains and thus discharge into streams. No special action is recorded during the year. The Medical Officer of Health for Newmarket Rural District reported specially on this subject to his Council in 1924 regarding conditions at Soham, the largest rural parish. On the other hand there is little or no pollution of streams by solids, as only the largest houses have water closets, and these commonly have their own cesspool.

The Rural Districts vary as regards rapidity of conversion from the antiquated privy-pit to the more modern pail type of closet. From published statements Chesterton has the best record with 77 per cent. pails, and 12 per cent. privy pits, Melbourn coming next with 60 per cent. pails and 30 per cent. privy pits. Newmarket Rural District comes far behind with a record of 15 per cent. pails and 61 per cent. privy pits, leaving much to be desired. Districts with unpublished figures may be presumed to be also unsatisfactory.

*Refuse Disposal.*—In Cambridge there is a bi-weekly collection, the refuse being burnt at the Destructor. With the exception of a scheme for earth-closets at Waterbeach in the Chesterton Rural District there are no public systems for removal of house-refuse or closet contents in the rural area, and several of the Medical Officers of Health emphasise the need for such a scheme in the larger villages where there are aggregations of cottages in a confined space. This conclusion will meet with the entire concurrence of those who have had opportunities for observing the very unsatisfactory conditions which exist round cottages which have little or no garden ground.

## HOUSING OF THE WORKING CLASSES.

In the whole area of the Administrative County 536 new houses were built during the year, 277 in Cambridge and 256 in the Rural Districts. Of these, 393 were erected with State assistance under the Housing Acts, of which 133 were erected by the Local Authority in Cambridge, and 68 in the Rural Districts, while 192 were built by other bodies or persons with the aid of the State subsidy, 88 in Cambridge and 104 in the Rural Districts. The remaining 143 were erected by unassisted private enterprise.

The total number of houses inspected for defects under the Public Health or Housing Acts was 2,477, of which 1,093 were in Cambridge and 1,384 in the Rural Districts. Houses inspected under the Housing (Inspection of District) Regulations, 1910, numbered 1,048 (Cambridge 483, Rural Districts 565). Of the houses inspected, 116 were recorded as unfit for human habitation, 45 in Cambridge and 71 in the Rural Districts, while 1,085 (Cambridge 874, Rural 211) were regarded as not in all respects reasonably fit for habitation.

As usual, much the greater part of repair work was achieved by informal intimation to owners under the Housing, Town Planning Act, 1919, this resulting in the remedy of defects in 949 houses, of which 771 were in Cambridge, and 178 in the Rural Districts. Statutory notices were served for repair of 22 houses only (Cambridge 21, Rural 1), of which 14 in Cambridge were rendered fit by the owners and none in either area by the Local Authority in default of the owners. Similarly under the Public Health Acts, notices requiring the remedy of defects were served with respect to 40 houses (21 Cambridge, 19 Rural). In consequence, defects were remedied by the owners in 29 houses (Cambridge 19, Rural 10). In only one instance, in Cambridge, did the Local Authority act in default of the owner.

The conference between the County Public Health and Housing Committee and representatives of the Local Sanitary Authorities in January, 1925, was mentioned in some detail in last year's report. It was agreed that it was desirable that the County Council should undertake the making of loans or advances in the rural area, leaving to the District Councils the making of grants or subsidies. This was generally approved by the County Council, and

the Finance Committee eventually advised that the Council should be prepared to lend money on mortgage to persons (a) constructing or altering houses or undertaking to do so, and (b) acquiring or undertaking to acquire houses constructed after April, 1923. The conditions include the provisions that the value of house and site are not to exceed £1,500, the superficial area not to be less than 620 feet if two storeys, nor less than 550 feet if one storey.

That housing accommodation is still inadequate in spite of the housing schemes which are being carried out by the Local Authorities is again demonstrated by the fact that Closing Orders for unfit houses are seldom served, there being no alternative accommodation. Closing orders made in the whole County during the year were limited to 29 in Chesterton Rural District and 3 in Melbourn Rural District, and in no case was an Order for demolition made.

In Cambridge, where the number of houses erected by the Town Council and others has averaged 135 per annum during the six years 1920-1925, compared with a pre-war average of 115 for the years 1910-14, the need for houses is recorded to be still very great, and from 700 to 800 families are still awaiting Council houses. The Town Council have themselves built 417 houses during the past six years, including 133 in 1925. A "Housing Week" was held during the year, including a very successful exhibition which was largely attended, and to this publicity campaign Dr. Laird attributes much of the increase in the number of houses erected by private enterprise. He records, however, that little is being done to relieve the pressure upon old and dilapidated property, and notes that the anticipated movement upwards from the lowest stratum of housing into new houses is not yet in evidence.

The Chesterton Rural District Council continue a very active housing policy. Their tables show that the Council themselves have built 100 houses under the 1919 Act, and that they completed 50 in 1925 under the 1924 Act out of an approved scheme of 216 houses to be built under the latter Act in 32 parishes. Also 115 houses have been built by private enterprise with the aid of the State subsidy under the 1923 Act. The Council have recently, in June, 1926, celebrated the completion of the 200 houses which they have themselves erected with State assistance, and it is confidently expected that before the end of 1926 over 200 houses will also have been erected by private persons under the scheme. Applications for houses from persons belonging to the District exceed 500.

In Melbourn Rural District the general standard of existing houses is said to be low as regards structure, and there is much over crowding due to the number of houses with an insufficient number of rooms. Forty per cent. of working class houses have only two bedrooms, and 20 per cent. have only one bedroom. A shortage of 100 houses is estimated, a considerable proportion being to replace unfit or overcrowded houses as well as to meet fresh demands. The District Council have built 56 houses and propose to build 34 under their scheme. None were erected by them during 1925, and only 4 by private persons with the aid of the State subsidy. The proposed scheme would not appear to include several parishes in which unfit or over crowded houses are reported.

In Newmarket Rural District an urgent need for houses with three bedrooms is reported. The Council erected 66 houses in 1920-21 but none in 1925. They have adopted a proposal to erect 200 houses in three years, but this does not appear to include 9 out of their 22 parishes, the respective Parish Councils not having advised action.

Close on 600 inspections were made during the year, and a large proportion of the houses are said to be old and not of a high standard structurally. There is also a considerable number of cases of overcrowding. Six houses were built privately with the aid of the State subsidy during the year.

In Swavesey Rural District the erection of houses during the year has been limited to 6 houses built privately without subsidy. None have been built by the District Council, and the report does not indicate that a housing scheme is contemplated. The Medical Officer of Health reports that there is still a shortage, especially in Swavesey, and that overcrowding exists.

In Caxton Rural District the Local Authority themselves built 18 houses during the year, and 8 were built privately with the aid of the State subsidy. The Medical Officer of Health notes that overcrowding occurs to a considerable extent and a number of houses require demolition. Six houses are being erected in two parishes, and schemes are said to be in hand for two other parishes, but the complete scheme does not appear.

*Housing of County Council's employees.*—The Standing Joint Committee have proceeded during the year to develop their scheme for building 11 houses for the Police at an estimated cost of £7,700, including sites. Sites were purchased and in a number of instances tenders were accepted for the erection of houses.

Subject to the State subsidy being received, the Education Committee resolved to expand their scheme for the erection of 6 houses so as to include others where a need really exists, one house being built each year. Two houses have recently been built, making a total of 34 houses provided for Head Teachers of Council Schools, and plans have been prepared for a third house.

## VITAL STATISTICS AND INCIDENCE OF INFECTIOUS DISEASE.

*Population.*—Census returns for 1921 showed an increase of population during the ten years since the Census of 1911 to the number of 1,280 for the Administrative County, the population of Cambridge showing an increase of 3,452, while a decrease of 2,172 was recorded for the total population of the Rural Districts, the only Rural District which showed an increase being Chesterton. The whole of the increase was due to excess of births over deaths, emigration (which includes War deaths outside the Country) being in excess of immigration.

The following figures are furnished by the Registrar-General as representing the populations to be used for calculation of birth and death rates for the year 1925. The inclusion of Duxford Aerodrome accounts for the higher figure in the first column.

		<i>For</i>	<i>For</i>
		<i>Birth Rate.</i>	<i>Death Rate.</i>
Administrative County	...	129810	129290
Cambridge Borough	...	59020	59020
Aggregate Rural Districts	...	70790	70270
Chesterton	...	24120	24120
Caxton and Arrington	...	7279	7279
Linton	...	10000	9480
Melbourn	...	8014	8014
Newmarket	...	18890	18890
Swavesey	...	2487	2487

The excess of births over deaths during 1925 yields a natural increase of the population for the year of 430, compared with 384 in 1924, there having been 49 fewer births and 95 fewer deaths than in that year.

*Birth Rate.*—The statistics for 1925, based on figures furnished by the Registrar-General are as follows:—

		<i>Registered Births.</i>	<i>Birth Rate per 1,000 living.</i>
Administrative County	...	1944	14.3
Cambridge Borough	...	836	14.5
Rural Districts	...	1108	15.6

The following figures show the reduction as compared with 1914 in both urban and rural areas:—

	<i>Number of Births.</i>			<i>Birth Rate.</i>		
	<i>Boro.</i>	<i>Rural.</i>	<i>Total</i>	<i>Boro.</i>	<i>Rural.</i>	<i>Total</i>
			<i>County.</i>			<i>County.</i>
1914	...	996	1393	2389	...	17.4
1924	...	867	1126	1993	...	14.7
1925	...	836	1108	1944	...	14.2

The birth rate for Cambridge, 14.2 per 1,000, was, as usual, much below that for the Great Towns (18.8) and for England and Wales (18.3). The rates for the Cambridgeshire Rural Districts, from highest to lowest were:—Linton 18.9 (189 births), Swavesey 16.5 (41), Caxton 15.9 (116), Newmarket 15.8 (300), Chesterton 14.8 (358), Melbourn 12.9 (104). The relative positions of these districts vary greatly from year to year. No figure is furnished by the Registrar-General for Rural England and Wales, with which these rates can be compared.

Following on the great fluctuations in the birth rate arising out of war conditions there has been a steady reduction in the rate since 1920, continuing the downward tendency noted for many years before the War. Comparison of the birth rate for 1925 with that for 1901, viz., 23.1 per 1,000, shows that the rate of increase by births per 1,000 of the population, was 39 per cent. lower in 1925 than it was 24 years ago. The Census returns also show that

the average number of persons per family in the whole Administrative County fell from 4.03 in 1911 to 3.76 in 1921, a decline of 6.7 per cent. in 10 years.

There were 95 illegitimate births in the Administrative County, 31 in Cambridge, 64 in the Rural Districts, compared with 50 in Cambridge, 59 in the Rural Districts, and 109 total in 1924. Calculated as a percentage of total births, the proportion of illegitimate births was 3.7 in Cambridge, 5.8 in the rural area, and 4.9 in the Administrative County, against 5.8, 5.2 and 5.5 per cent. respectively in 1924.

The proportion borne by illegitimate to total births averaged 4.8 per cent. during the three years 1911-13. It rose considerably during 1914-20 owing to war and other special reasons, being as high as 8.7 per cent. in 1919. During the years 1921-25 this proportion has averaged 5.6 per cent. Although much below the war years, it will be seen that illegitimacy, as based on total births, is still higher than during the years immediately preceding the war.

The proportion of still-births notified to total births notified was as follows:—

Borough of Cambridge	35	still-births,	or 3.8	per cent.
Rural Area	30	„ „	2.8	„
Whole County	65	„ „	3.3	„

These figures show a slight increase for Cambridge and a decrease for the Rural Districts on the proportion of still-births which occurred in the previous year, the percentage in 1924 having been 3.6 for Cambridge, 3.9 for the rural area, and 3.8 for the Administrative County.

*Death Rate from all Causes.*—After allowing for deaths occurring away from the usual place of residence, the nett death rate for the whole County was 11.7 per 1,000 (12.2 for England and Wales). This rate was 0.7 per 1,000 lower

than the 1924 rate for the County (12.4), and 0.8 below the average for the preceding ten years. The rates for Cambridge and the rural areas were 10.4 and 12.1 respectively, the death rate for Cambridge being 1.8 below that for the Great Towns (12.2).

The total deaths in the whole County numbered 1,514 (Cambridge 614, Rural 900), being 95 fewer than in 1924. Influenza and respiratory diseases (excluding tuberculosis) accounted for nearly half the decrease, and there were smaller reductions in deaths from other causes, of which tuberculosis, cancer, cerebral haemorrhage and nephritis were the chief. Increases were recorded under a few headings, including measles and cirrhosis of the liver.

*Infant Mortality.*--The number of deaths under one year, 99 (Cambridge 38, Rural Districts 61), was in the proportion approximately of 51 deaths per 1,000 *births* (England and Wales 75). The corresponding approximate rate for Cambridge was 45, as usual much below the rate for the Great Towns (79), and that for the rural area was 55 per 1,000 births. The rate for the Administrative County represents a saving of 11 lives per 1,000 births, when compared with the annual average (62) for the preceding 10 years 1915-1924, and a saving of 35 lives per 1,000 births when compared with the annual average (86) for the ten years 1904-1913.

Compared with 1924, there was a reduction in deaths from respiratory diseases and a slight increase in deaths from whooping cough and the congenital debility group. Deaths from congenital debility, malformation, and premature birth, which should be influenced by ante-natal care, numbered approximately 30 per 1,000 births, compared with annual averages of 29 and 28 for the five years 1915-19 and 1920-24 respectively.

The mortality during the year among illegitimate infants, compared with that among the legitimate, is shown by the following statement of deaths (approximate) per 1,000 births:—

	<i>Legitimate.</i>			
	<i>Mortality</i>			
	<i>Births.</i>	<i>Rate.</i>	<i>Births.</i>	<i>Rate.</i>
Cambridge Borough	805	46	31	32
Rural Districts	... 1044	53	64	94
Whole County	... 1849	50	95	74

The actual numbers of deaths of illegitimate infants were 1 in Cambridge Borough and 6 in the Rural Districts, a total of 7 in the Administrative County among 95 illegitimate infants born (Cambridge 31, Rural Districts 64). These figures are small, and vary in the Borough and Rural Districts from year to year. As a more reliable basis of comparison the following figures are therefore given, showing the respective mortality rates among 10,334 legitimate and 571 illegitimate infants born in the Administrative County during the five years 1921-1925.

#### *Infant Deaths per 1,000 births, 1921-25.*

	<i>Legitimate.</i>	<i>Illegitimate.</i>
Cambridge Borough	... 52	74
Rural Districts	... 52	84
Whole County	... 52	79

It will be seen that during this period of five years mortality among illegitimate infants in the Administrative County as a whole exceeded that among legitimate infants by rather more than 50 per cent., the excess being greater in the rural area than in Cambridge. The excess of illegitimate mortality over legitimate is less than that obtaining in England and Wales as a whole.

*Maternal Mortality.*—Deaths of mothers in connection

with child-birth numbered 5, of which 3 (Cambridge 1, Rural Districts 2) were due to puerperal sepsis and 2 (Cambridge 1, Rural Districts 1) to other accidents and diseases of pregnancy and child-birth. The totals for the Administrative County in 1924 were sepsis 3, other accidents 8, total 11.

Notifications of puerperal sepsis numbered 4, of which 3 were from Cambridge and 1 from the Rural Districts. The 3 deaths registered from this cause were identical in number with the annual average for the preceding ten years.

During the ten years 1915-1924 the maternal deaths from other causes than sepsis totalled 20 in Cambridge, 35 in the rural districts and 55 in the Administrative County. The mortality rate from this cause was 1.0 per 1,000 *births* in 1925, against an average rate of 2.6 per 1,000 during the preceding ten years. The numbers, however, are small, and show considerable variation from year to year.

*Infectious Diseases.*—The record was a favourable one compared with that for 1924. Mortality from scarlet fever and diphtheria was very low, and there was a considerable reduction in the prevalence of diphtheria. There was some reduction in deaths from tuberculosis, pneumonia and puerperal sepsis, and a considerable decrease in mortality from influenza, which was abnormally high in 1924. Mortality from diarrhoeal diseases among infants was very low, but against this was an increase of the deaths among children from measles and whooping cough which were very prevalent during the year. As usual, there were no deaths from enteric fever.

*Small-pox.*—No case of small-pox occurred. The information given in the Cambridge report shows that only 30.04 per cent. of infants were vaccinated in the old

Borough during the first half of 1924, a decline on the previous year, and the percentage of children vaccinated in the rural area is known to be low also. The County Council resolved to support the following resolution passed by the East Riding of Yorkshire and the Isle of Ely County Councils:—

“ That in the opinion of this Council the present method of obtaining exemption from vaccination is most unsatisfactory, that the ease with which such exemption can be obtained constitutes a serious menace to the Public Health, and that except in very special circumstances vaccination should in all cases be made compulsory.”

Chicken-pox is compulsorily notifiable in the Newmarket and Melbourn Rural Districts, and apart from this, cases notified through the Public Elementary Schools are always made the subject of enquiry, a medical opinion being obtained at the outset of any outbreak.

*Scarlet Fever.*—Notifications received during the year numbered 256, compared with 247 in 1924. Of these, 78 were from Cambridge, 33 being from a public school, colleges and a general hospital, and 178 from the Rural Districts, where the greatest prevalence was in the Newmarket Rural District, with 128 notified cases. In this district there was special incidence in parishes round Newmarket (West Suffolk), and especially in the parish of Fordham with 49 cases. It is possible that the over-crowded condition of the isolation hospital may have contributed to this excessive incidence.

The Dick test has not been resorted to.

Altogether 175 cases, or 68 per cent. of those notified, were removed to various isolation hospitals. Mortality from scarlet fever was again very low, being limited to 2

deaths, one in Cambridge and one in the Newmarket Rural District. From figures given in the Cambridge report it is calculated that the average case mortality for the past 22 years has not exceeded 1 per cent. of notified cases, the corresponding proportion for the whole Administrative County for the past 18 years being 1.1 per cent.

*Diphtheria.*—Notifications received showed a much lower prevalence than in the previous year, numbering 43 against 72 in 1924. Of these, 32 were from Cambridge and 11 from the Rural Districts, the largest number being 5 from the Caxton Rural District. There were 2 deaths, of which 1 was in Cambridge and 1 in the Rural Districts. On the Cambridge figures the fatality rate based on the number of notified cases works out at an average of 15.6 per cent. of deaths during the past 22 years, the corresponding rate for 1925 being 3.1 per cent. The deaths in the whole Administrative County during the past 18 years constitute a fatality rate of 12.25 per 100 notified cases.

Altogether, 38 cases, or 89 per cent. of those notified, were isolated in hospitals. As showing the value of bacteriological diagnosis, Dr. Laird records that in one Cambridge school, 11 children were ascertained by examination of swabs to be carriers of infection. In the rural area it was only necessary to take 38 swabs from school children owing to the very low incidence of diphtheria. There has been a progressive decline among elementary school children during the past five years. The Schick test has not been employed. Antitoxin is provided by the Local Sanitary Authorities.

*Enteric Fever.*—For many years the number of notifications has been small, not averaging more than 7.4 per annum during the ten years ending 1925, compared with 14.8 per annum during the 8 years 1908-1915. Only 7 deaths have been recorded during the past 10 years,

against 24 deaths during the preceding 8 years. Last year 8 notifications were received (Cambridge Borough 1, Rural Districts 7). There were no deaths from this cause.

*Diarrhoeal Diseases.*—One death among children under two years of age occurred in Cambridge and one in the rural area, making a total of 2 deaths. The death rates per 1,000 births were 1.0 for the Administrative County (England and Wales 8.4), 1.2 for Cambridge (Great Towns 10.8), and 0.9 for the rural area. The local rates for these preventable diseases were thus very much below those for the country generally.

The deaths during the 10 years ending 1925 have averaged 3.1 per 1,000 births annually, against an annual average of 8.8 deaths per 1,000 births during the preceding 6 years 1910-1915. This considerable reduction may reasonably in large part be attributed to educational methods, including those brought to bear through the respective child welfare schemes.

*Whooping Cough.*—The number of deaths recorded was 10, of which 7 were in Cambridge and 3 in the Rural Districts. The mortality rate for the Administrative County was 0.08 per 1,000, that for England and Wales being 0.15. Nursing facilities are provided under the Maternity and Child Welfare schemes.

*Measles.*—Thirteen deaths occurred, 7 in Cambridge and 6 in the rural area. The mortality rate for the Administrative County was 0.10 per 1,000 (England and Wales 0.13). For this disease also, nursing facilities are provided.

*Acute Poliomyelitis (Infantile Paralysis).*—Only one notification was received, in Cambridge, but two deaths from " poliomyelitis " in the rural area are included in the Registrar-General's mortality returns.

*Cerebro-spinal Meningitis.*—No notifications were received. One death from meningo-coccal meningitis was recorded in the rural area. Consultant opinion and serum treatment are provided by the County Council under the Public Health (Cerebro-Spinal Fever) Regulations, 1918.

*Encephalitis Lethargica.*—Twelve notifications were received, 5 from Cambridge and 7 from the rural area. Four were treated in hospital. Four deaths were recorded (Cambridge 1, Rural Districts 3), making a total of 13 deaths and 42 notifications since this disease became notifiable in 1919.

*Ophthalmia Neonatorum.*—Six notifications received comprised 4 from Cambridge and 2 from the rural area. None of these cases are stated to have been admitted to hospital, and no loss of vision is recorded. It may here be noted that the 7 infants for whom midwives sought medical aid under the provisions of the Midwives Acts, all made a satisfactory recovery.

*Pulmonary Tuberculosis.*—The total number of notifications received during the year was 286, of which 278 were on Form A and 8 on Form B. After deducting duplicates the number of notifications received for the first time was 279, or 2.15 per thousand of the population. The figures as to total cases coming to knowledge during the year for the first time are given under the previous section of this report on Tuberculosis.

The number of deaths registered from this cause was 91, against 94 in 1924. In Cambridge Borough there were 45 deaths, compared with 46 in 1924, the number of deaths registered in the rural area being 46, compared with 48 in the previous year. The mortality rates per 1,000 living were:—Administrative County 0.70 (0.72 in 1924), Cambridge Borough 0.76 (0.78 in 1924), and Rural Districts 0.58 (0.68 in 1924).

Mortality attributed to pulmonary tuberculosis was thus slightly lower for the County as a whole than in the previous year. The average mortality from this cause rose from 112 per annum for the five pre-War years 1910-14 to 135 per annum during the four War years 1915-18, and then fell to an average of 92 deaths per annum during the seven post-War years 1919-25.

*Tuberculosis of Other Organs.*—Total notifications received during the year numbered 61, of which 58 were on Form A and 3 on Form B. After deducting duplicates the number of notifications received for the first time was 59, or 0.45 per 1,000 of the population. The deaths numbered 15, compared with 25 in 1924. Of these, 6 occurred in Cambridge and 9 in the Rural Districts. The mortality rates per 1,000 living were as follows:—Administrative County, 0.12 (0.19 in 1924), Cambridge 0.10 (0.15 in 1924), and Rural Districts 0.11 (0.22 in 1924).

Deaths under this heading averaged 34 per annum from 1910-1914, 25 per annum from 1915-1918, and 23 per annum from 1919-1925.

The total deaths in the Administrative County from tuberculosis of all organs numbered 106, of which 51 were recorded in Cambridge and 55 in the Rural Districts. These yield mortality rates of 0.82, 0.86, and 0.69 per 1,000. Comparing the seven years since the War with the seven years immediately preceding it, the average number of lives lost from tuberculosis of all organs in each post-War year was 115, as compared with 147 for the pre-War years, an annual saving of some 32 lives. Whereas tuberculosis caused one out of every 11 deaths in 1909, the proportion in 1925 was reduced to 1 in 14.

*Pneumonia.*—Deaths from this cause numbered 57, compared with 64 in 1924. Of these, 25 occurred in Cam-

bridge and 32 in the rural area. The mortality rate for Cambridge was 0.42 per 1,000 living, for the rural area 0.40, and for the whole County 0.44 per 1,000.

The number of notifications of acute primary pneumonia and acute influenzal pneumonia received in Cambridge was 26, and in the rural area 37, a total of 63 for the Administrative County. Notification is obviously incomplete.

*Cancer.*—There were 213 deaths attributed to cancer, against 226 in 1924. Of these, 87 occurred in Cambridge and 126 in the rural area. The proportion of recorded deaths per 1,000 living was 1.65 in the Administrative County (1.74 in 1924), 1.47 in Cambridge (1.56 in 1924), and 1.79 in the rural area (1.89 in 1924). During the present century mortality from this cause has fluctuated, but the general tendency has been in an upward direction from a mortality rate of 1.00 per 1,000 in the year 1900 to a maximum of 1.74 per 1,000 in 1924, the County thus sharing the experience common to England and Wales. The proportion of deaths as based on total population, regardless of age, is constantly higher in the rural area than in Cambridge.

*Influenza.*—Deaths attributed to this cause in the Administrative County fell from 63 in 1924 to 45 in 1925 (Cambridge 24, Rural Districts 21), yielding mortality rates of 0.35, 0.40 and 0.29 per 1,000 respectively (England and Wales 0.32, Great Towns 0.30). Excluding the pandemic years 1918-19 from consideration, the loss of life was somewhat in excess of the annual average of 37 deaths for the 18 years 1907-1924, though much less than in 1924. The greatest loss of life occurred after 45 years, only a quarter of the deaths occurring at earlier ages.

FRANK ROBINSON,  
County Hall,                   *County Medical Officer of Health.*  
Cambridge.

TABLE I.—Causes of Death at Different Periods of Life in the Administrative County of Cambridge, 1925.

CAUSES OF DEATH	Sex.	AGGREGATE OF URBAN DISTRICTS.										AGGREGATE OF RURAL DISTRICTS.														
		All Ages.		0—	1—	2—	5—	15—	25—	45—	65—	75—	All Ages.		0—	1—	2—	5—	15—	25—	45—	65—	75—			
		M	F										M	F												
ALL CAUSES	...	290	324	21	17	7	2	4	3	9	6	27	66	73	125	432	468	27	3	2	11	20	39	102	94	170
1 Enteric fever	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2 Small-pox	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
3 Measles	...	2	5	1	2	1	2	1	—	—	—	—	—	—	—	3	—	—	1	1	1	—	—	—	—	
4 Scarlet fever	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
5 Whooping cough	...	5	2	1	1	2	1	—	—	—	—	—	—	—	—	3	3	—	—	—	—	—	—	—	—	
6 Diphtheria	...	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	
7 Influenza	...	10	14	1	—	—	—	—	—	1	2	2	4	6	6	12	—	2	—	—	—	2	2	5	1	
8 Encephalitis lethargica	...	—	—	—	—	—	—	—	—	—	—	—	—	1	2	—	—	—	—	—	—	1	2	3	3	
9 Meningococcal meningitis	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	
10 Tuberculosis of respiratory system	...	25	20	—	—	1	—	—	3	9	7	11	1	—	—	29	—	—	—	—	4	15	7	2	1	
11 Other tuberculous diseases	...	3	3	—	—	—	—	—	1	1	1	1	—	—	—	6	—	—	—	1	2	2	1	—	—	
12 Cancer, malignant disease	...	43	44	—	—	—	—	—	1	2	22	11	7	62	—	—	—	—	—	1	1	22	22	16		
13 Rheumatic fever	...	—	—	—	—	—	—	—	—	—	—	1	—	—	—	4	—	—	—	2	1	1	—	—	—	
14 Diabetes	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	3	2	1	1	
15 Cerebral haemorrhage, &c.	...	17	34	—	—	—	—	—	—	—	6	7	4	23	—	—	—	—	—	—	—	4	7	12		
16 Heart disease	...	30	43	—	—	—	—	—	—	1	8	14	7	66	—	—	—	—	—	1	2	13	18	32		
17 Arterio-sclerosis	...	5	7	—	—	—	—	—	—	—	2	2	1	20	—	—	—	—	—	—	2	5	13	9		
18 Bronchitis	...	14	23	2	1	1	—	—	—	—	1	3	7	34	—	—	—	—	—	—	1	2	6	26		
19 Pneumonia (all forms)	...	12	13	1	3	4	—	—	—	—	3	3	1	12	—	—	—	—	—	2	2	4	6	20		
20 Other respiratory diseases	...	4	2	—	—	—	—	—	—	1	1	1	1	2	8	1	—	—	—	—	—	1	5	1		
21 Ulcer of stomach or duodenum	...	2	—	—	—	—	—	—	—	—	2	—	—	5	—	—	—	—	—	—	1	3	—	1		
22 Diarrhoea, &c.	...	—	—	—	—	—	—	—	—	—	—	1	—	1	2	—	—	—	—	—	1	2	—	1		
23 Appendicitis and typhilitis	...	—	—	—	—	—	—	—	1	1	—	—	—	—	2	—	—	—	—	1	1	—	—	—		
24 Cirrhosis of liver	...	—	—	—	—	—	—	—	—	1	—	2	1	—	—	5	—	—	—	—	3	2	—	—		
25 Acute and chronic nephritis	...	—	—	—	—	—	—	—	—	1	1	3	—	—	2	1	—	—	—	—	—	7	4	—		
26 Puerperal sepsis	...	—	—	—	—	—	—	—	—	1	3	3	4	12	—	—	—	—	—	—	—	5	4	3		
27 Other accidents and diseases of pregnancy and parturition	...	—	—	—	—	—	—	—	1	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—		
28 Congenital debility, and malformation, premature birth	...	13	7	13	7	—	—	—	—	—	—	—	—	—	17	17	—	—	—	—	—	—	—	—		
29 Suicide	...	—	—	—	—	—	—	—	—	—	3	1	—	—	9	—	—	—	—	—	2	5	1	1		
30 Other deaths from violence	...	16	6	1	1	—	1	3	1	4	3	2	1	18	—	1	1	—	3	—	1	11	1	2		
31 Other defined diseases	...	62	77	—	—	—	—	3	3	4	14	16	22	102	—	6	—	—	3	7	4	15	9	58		
32 Causes ill-defined or unknown	...	—	—	—	—	—	—	1	1	6	7	14	47	108	4	—	—	2	3	11	15	14	59			



TABLE II.

## VITAL STATISTICS OF COUNTY FOR 1925 AND PREVIOUS FIVE YEARS.

	<i>Population.</i>	<i>Births Nett.</i>		<i>Deaths Nett.</i>		<i>Rate per 1,000</i>	
		<i>No.</i>	<i>Rate.</i>	<i>No.</i>	<i>births.</i>		
		<i>Under 1 year.</i>	<i>All ages.</i>	<i>No.</i>	<i>Rate.</i>		
1920	131236	2717	20.7	137	50	1401	10.6
1921	129094	2291	17.7	132	58	1497	11.6
1922	129591	2125	16.4	127	59	1641	12.7
1923	*BR 129770	2140	16.5	110	51	1489	11.5
	+DR 129516						
1924	*BR 130070	1993	15.3	105	53	1609	12.4
	+DR 129800						
1925	*BR 129810	1944	14.3	99	51	1514	11.7
	+DR 129290						

\*BR. indicates population for calculating Birth Rate.

†DR      "      "      "      "      Death Rate.

TABLE III.

## NOTIFICATIONS OF INFECTIOUS DISEASE RECEIVED DURING THE YEAR 1925.

	Cambridge.	Caxton and Arrington.	Chesterton.	Linton.	Melbourn.	Newmarket.	Swavesey.	Total.	Admitted to Hospital.	Died.
Small-pox ...										
Diphtheria ...	32	5	1	—	3	1	1	43	38	2
Scarlet Fever...	78	4	26	9	10	128	1	256	174	2
Enteric Fever	1	—	6	—	1	—	—	8	5	—
Puerperal Fever	3	—	—	—	—	1	—	4	1	3
Pneumonia ...	26	4	23	—	—	10	—	63	4	57
Erysipelas ...	15	1	6	2	1	9	—	34	1	...
Encephalitis										
Lethargica	5	—	5	1	—	1	—	12	4	4
Cerebro-Spinal										
Meningitis	—	—	—	—	—	—	—	—	—	*1
Acute										
Poliomyelitis	1	—	—	—	—	—	—	1	—	...
Ophthalmia										
Neonatorum	4	—	—	1	—	1	—	6	—	—
Tuberculosis,										
Pulmonary ...	154	13	38	14	5	50	5	279	...	91
Non-Pulmonary	30	6	11	4	1	5	2	59	...	15

\* Meningo-coccal Meningitis.



